

maintains a profile for each subscriber of services provided by the platform. The system and method of the present invention provides a Subscriber Service Manager and a Customization Module for registering new subscriber profile data and/or customizing preexisting subscriber profile data. Customization includes selecting or deselecting subscriber services offered by the Enhanced Service Platform, or changing data entries in the subscriber profile. The information in the profile may include E-mail addresses, billing information, the names of the services the subscriber subscribes to, personal telephone numbers, and related data that is specific to the subscriber. Subscribers register new data and update previously stored data in their profile using the system and methods of the present invention. Further, subscribers may query their subscriber profile.

The Subscriber Service Manager is configured to receive various requests from the subscriber. In particular, the Subscriber Service Manager is configured to receive a request, termed a "transaction-ID request," to obtain permission to register and/or customize subscriber profile data. Upon receiving such a transaction-ID request, the Subscriber Service Manager supplies the subscriber with a transaction identifier, and stores a copy of the transaction identifier.

The Subscriber Service Manager is also configured to receive subscriber profile query requests. Upon receiving such a request, the Subscriber Service Manager supplies the subscriber with data from the subscriber's profile. Typically the query will be for the data contained in specific fields of the subscriber's profile.

The Customization Module is configured to receive a customization message. The customization message is a message originated by the subscriber that contains new profile data for registration or profile customization. The customization message may be an E-mail or a message generated by web based applications. When a valid customization message is received by the system, the message will specify the subscriber profile data to be registered, as well as the transaction identifier supplied by the Subscriber Service Manager. The Customization Module compares the transaction identifier in the customization message with the copy of the transaction identifier stored by the Subscriber Service Manager. Only if they match does the Customization Module register the subscriber profile data.

In a preferred embodiment, a subscriber first telephones the service platform and provides information that is used to verify that the subscriber has a privileged status that entitles the subscriber to use the platform's services. The subscriber then makes a transaction-ID request to register profile data such as an E-mail address. In response to the transaction-ID request, the service platform supplies a transaction identifier to the subscriber, and stores the transaction identifier, a time-stamp and the subscriber's telephone number for later retrieval. The subscriber then sends a customization message to the service platform requesting that the subscriber's profile be customized or updated with specified subscriber profile data. In addition to subscriber profile data, the customization message includes the transaction identifier. Upon receiving the subscriber's customization message, the Customization Module uses the transaction identifier to verify the customization request. If the customization request is verified, the Customization Module registers the subscriber profile data and/or customizes the subscriber's profile. Then, the Customization Module sends a registration notification to the subscriber, informing the subscriber that new data has been registered in the subscriber's profile and/or the subscriber's profile has been customized.

Preferably, the registration notification is sent to the subscriber's E-mail address, which is registered in the

subscriber's profile. If the registration notification is not deliverable, the Customization Module will attempt to redeliver the registration notification. If a certain number of such delivery attempts fail, the service platform contacts the subscriber via a telephone number stored in the subscriber's profile to deliver a voice message indicating that the subscriber's registered E-mail address may be invalid or inoperative. In this manner, the service platform solves personal E-mail address specification, verification, and notification issues commonly encountered in subscriber profile registration processes.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The Enhanced Service Platform

Referring to FIG. 1, there is shown an embodiment of the Enhanced Service Platform **100** of the present invention. The Enhanced Service Platform **100** may be implemented using a programmed general-purpose computer system **102**. The Enhanced Service Platform **100** may include: one or more data processing units (CPUs) **104**; memory **108**, which will typically include both high speed random access memory as well as non-volatile memory (such as one or more magnetic disk drives); a network or other communication interface **112**, for communicating with other computers and other devices; a telephone interface **114**, for receiving and forwarding telephone calls; and one or more communication busses **106**, for interconnecting the CPU(s) **104**, memory **108**, user interface **110**, network interface **112**, and telephone switch **114**.

The computer system's memory **108** stores procedures and data, typically including:

- an operating system **116** for providing basic system services;
 - a subscriber service manager **120**, for providing telephony services;
 - a customization module **128**, for providing subscriber data registration and profile customization services;
 - a voice mail server **130**, for receiving and forwarding voice messages; and
 - a database module **132**, for storing subscriber profile data.
- The subscriber service manager **120** may include:
- an E-mail services module **122**, for providing E-mail services to subscribers;
 - a one number telephone service **124**, for providing a plurality of one-number telephony services to subscribers; and
 - a fax forwarding service **126**, for forwarding faxes to subscribers via E-mail.

Subscriber Workstation and Interfaces to Enhanced Service Platform

Referring to FIG. 2, there is shown a system **200** in which a subscriber workstation **206** communicates with an Enhanced Service Platform **100** via communications network **204** (such as the Internet) and a web server **202** or a mail server **208**. In the preferred embodiment, only the mail server **208** is used to direct communications from subscriber workstations **206** to the enhanced service platform **100**. The mail server **208** is preferably implemented as a separate server from the enhanced service platform **100**, which helps to protect the enhanced service platform **100** from security attacks and avoids the need for an expensive firewall. In an alternate embodiment, the mail server **208** may be integrated with the enhanced service platform **100**, in which case additional security equipment may be needed to prevent unwanted communications between other computers and the